# Tuberculosis Elimination

## WHAT IS THE HEALTH ISSUE?

Tuberculosis (TB) is a leading infectious killer of young adults worldwide, claiming the lives of more than 2 million people each year. About one third of the world's population is latently infected with Mycobacterium tuberculosis, the bacterium that causes TB. There are an estimated 9 to 14 million persons in the United States infected with Mycobacterium tuberculosis. About 10 percent of these individuals will develop active TB disease at some point in their lives. Those who are infected with HIV have a far greater chance of developing active TB disease. Persons born outside the United States now account for more than half of all U.S. TB cases.

## WHAT HAS CDC ACCOMPLISHED?

CDC is making progress in efforts to eliminate TB in the United States. Since 1992, the most recent peak reported TB cases have declined 44.2 percent. From 2002 to 2003, reported cases of TB in the United States declined 1.3 percent (from 15,075 to 14,874). This represents the 11th consecutive year that TB cases have declined nationally.

CDC works to eliminate TB in the United States and to control the spread of the disease globally. Within the United States, CDC provides financial and technical assistance to local, state, and territorial TB control programs to monitor TB, sustain decreases in new cases, and support directly observed therapy and investigation of contacts to active TB cases. CDC also supports the TB Trials Consortium to develop and test new therapies, the TB Epidemiological Studies Consortium to evaluate new approaches to controlling TB, and the Regional Training and Medical Consultation Centers to provide training and education in TB prevention and control. Internationally, CDC collaborates with the United States Agency for International Development, the World Health Organization, and others through efforts such as the Stop TB Initiative (see www.stoptb.org) and through assistance to specific countries.

This year, in collaboration with state TB programs, CDC implemented a national TB genotyping program, which was based on the scientific findings of a 5-year public health research investment. This program allows TB programs to compare the DNA fingerprints of bacteria that caused TB in individual patients and to detect tuberculosis outbreaks almost immediately.

***Example of Program in Action:***

New York City's TB control program has been one of the most dramatic public health successes in recent decades. In the early 1990s, the city was the epicenter of the TB and multidrug-resistant TB epidemic in the country. Funding from federal, state, and local sources enabled the city's program to implement new TB control initiatives, such as

- Case management of all TB patients and provision of directly observed therapy.
- Cohort reviews by program staff on all TB cases.
- Improved delivery of clinical care by health department chest clinics.
- Targeted testing of high-risk populations.

The result was a 70 percent decline in the number of TB cases in New York City from 3,811 cases in 1992 to 1,140 in 2003. Multi-drug resistant TB declined by nearly 96 percent from 1992 (441 cases) to 2003 (19 cases).

## WHAT ARE THE NEXT STEPS?

CDC will work in concert with state, national, and international partners to continue to address the Institute of Medicine's recommendations released in their report Ending Neglect: The Elimination of TB in the United States. As incidence declines, new challenges in controlling TB emerge. In 2005, CDC will continue a pilot project to increase the capacity of low incidence states to respond to outbreaks and intensively manage and review TB cases to determine the barriers to elimination. CDC continues to support state and local TB programs to maintain control of TB in low incidence areas; to implement directly observed therapy and contact investigation; to disseminate new tools to aid in TB control, including diagnostics and treatments; and to help control TB globally.

For information on this and other CDC and ATSDR programs, visit www.cdc.gov/programs. 2005